

AMENDMENTS TO THE CLAIMS:

- 1-11. (previously cancelled)
12. (currently amended): An isolated nucleic acid fragment encoding an APS adenosine 5'-phosphosulfate kinase comprising:
 - (a) a nucleotide sequence encoding an amino acid sequence of at least 80% sequence identity, based on the Clustal method of alignment, when compared to SEQ ID NO:4; or
 - (b) a full-length complement of the nucleotide sequence of (a).
13. (currently amended): The isolated nucleic acid fragment of Claim 12 4 wherein the nucleic acid fragment is a functional RNA.
14. (currently amended): The isolated nucleic acid fragment of Claim 12 4, wherein the nucleotide sequence of (a) comprises SEQ ID NO:3.
15. (currently amended): A chimeric gene recombinant DNA construct comprising the isolated nucleic acid fragment of Claim 12 4 operably linked to at least one regulatory sequence.
16. (currently amended): A transformed host cell comprising the chimeric gene recombinant DNA construct of Claim 15 4.
17. (currently amended): A method of altering the level of expression of a sulfate assimilation an adenosine 5'-phosphosulfate kinase protein in a host cell comprising:
 - (a) transforming a host cell with the chimeric gene recombinant DNA construct of Claim 15 4; and
 - (b) growing the transformed host cell produced in step (a) under conditions that are suitable for expression of the chimeric gene recombinant DNA construct,wherein expression of the chimeric gene recombinant DNA construct results in production of altered levels of a sulfate assimilation an adenosine 5'-phosphosulfate kinase protein in the transformed host cell.

Claims 18-19 (cancelled)